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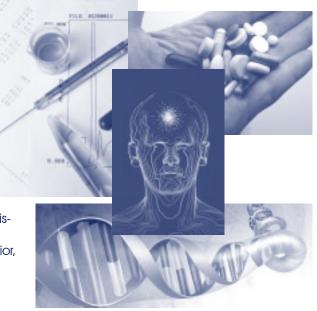
# Is it Possible to Prevent Alzheimer's Disease?

The rapid pace of
Alzheimer's disease
research over the past 25
years has unlocked many
secrets about this
devastating disease. We
now know a great deal
about AD's major characteristics and how they affect
memory, personality, behavior,
and the ability to think and
make decisions.

AD has no known cure, but findings from research supported by the National Institute on Aging (NIA) and others provide tantalizing clues about the origins and development of AD. These findings are leading investigators to wonder whether it might be possible to delay the onset of the disease, slow its progress, or someday, even prevent it altogether.

### Many AD Risk Factors

Some diseases, like measles, malaria, or cholera, have clear-cut causes. Preventing them is pretty straightforward—get vaccinated, eliminate the cause (mosquitoes in the case of malaria), or make sure that drinking



water is clean. Other diseases, such as diabetes, heart disease, or arthritis, are more complex. They develop when genetic, environmental, and lifestyle factors work together to cause the disease process to start. The importance of each risk factor may differ for each individual.

Everything we know about AD indicates that it falls into the second, more complex, group of diseases. This means that, right now, there is no "magic bullet" that can absolutely prevent the disease from happening. AD develops over many years and appears to be influenced by a

(see Is it Possible to Prevent AD?, page 2)



#### News From the Alzheimer's Disease Education and Referral (ADEAR) Center

A Service of the National Institute on Aging National Institutes of Health U.S. Department of Health and Human Services



## PBS Broadcast of "The Forgetting" explores impact of AD

Mark January 21, 2004, 9 pm on your calendar to tune in to the Public Broadcasting Service's first television program to tackle the entire spectrum of Alzheimer's disease. Based on the bestselling book by author David Shenk, The Forgetting: A Portrait of Alzheimer's explores AD and the human toll it takes on patients and caregivers, and the latest research in the race to find a cure. Several National Institute on Aging grantees offer their expertise during the broadcast, including Dr. Steven DeKosky, Dr. Rudy Tanzi, and Lisa Gwyther.

The Forgetting will be a two-hour special aimed at helping Americans understand and cope with the fearsome disease of Alzheimer's. The cornerstone of the project is a 90-minute documentary, broadcast nationally on PBS, based on Shenk's

(see "The Forgetting," page 5)





#### **Is it Possible to Prevent AD?**

(from page 1)

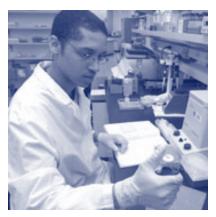
number of risk factors. We can't do anything about some of these risk factors. However, accumulating evidence from many studies suggests that we can do something about other factors that affect the likelihood that a person may develop AD.

### AD Risk Factors We Can't Do Anything About

Age is the most important known risk factor of AD. The risk of developing the disease doubles every 5 years over the age of 65. Several studies calculate that around half of persons over the age of 85 have AD. These facts are significant because of the growing numbers of people older than 65. More than 34 million people in the United States are now 65 or older. Even more significant, those older than 85—the group with the highest risk of AD—is the fastest growing population group in the country.

Genetic predisposition is the other

known AD risk factor that a person has no control over. Scientists have found genetic links to the two forms of AD. Early-onset AD is a very rare form of the disease that occurs in people between the ages of 30 and 60. Late-onset AD is the much more common form that develops after the age of 60.



In the 1980s, researchers realized that early-onset AD ran in families. They began to examine DNA samples from the families, searching for a common genetic trait. They found that mutations in certain genes on three chromosomes cause early-onset AD. A person has a 50 percent risk of developing early-onset AD if one parent has any of these genesic mutations. One of these genes directs the production of a protein, part of which is involved in the formation of beta-amyloid plaques. The mutations

in all 3 genes increase the production of the plaques. Beta-amyloid plaques are dense clumps of abnormal protein and other material found outside and around nerve cells in the brain. A large number of beta-amyloid plaques in brain tissue is one of the hallmarks of AD.

In 1992, investigators looking for genetic clues to late-onset AD found a gene, which they called APOE. The APOE protein helps carry cholesterol in the blood throughout the body. Since then, other studies have shown that slightly different forms of this APOE gene can influence AD risk:

- APOE g2, a rarely occurring form, may provide some protection;
- APOE g6, the most common form, appears to play a neutral role; and
- APOE g4, which is found in about 40 percent of people with AD, appears to increase risk.

In 2003, investigators announced that they had located another gene that appears to influence the age at which symptoms begin to appear in people with AD. This finding came only days

after other scientists reported that they had discovered that there are two chromosomes not previously linked to AD that contain genes also appearing to influence age-atonset of AD. These findings are important because they may open up avenues to further research on late-onset genes and

how they work. Knowledge gained could possibly lead to strategies for delaying the onset of AD. Delaying by even 5 years the time when AD symptoms begin could greatly reduce the numbers of people who have the disease.

In October 2003, the NIA announced a major expansion of AD and genetics research efforts. The AD Genetics Study will build a bank of genetic material and cell lines from individuals in families with more than two living siblings who have late-onset AD. The



availability of this valuable resource will allow geneticists to speed up the discovery of additional AD risk factor genes. Discovering risk factor genes is essential for understanding the causes of late-onset AD and for developing effective treatments and prevention strategies in the future.

### AD Risk Factors We Can Do Something About

Though we can't do much about our age or genetic profile, recent research has suggested that a number of lifestyle and environmental factors also may play a role in AD. The good news is that these factors are related to other major health concerns as well. Maintaining healthy habits in these areas will help maintain a person's overall health, and they may reduce the chances of developing AD.

Keeping your brain active. Studies have shown that engaging in intellectually stimulating activities is associated with reduced AD risk. For example, scientists funded by NIA have been studying a large group of older priests, nuns, and brothers since 1993. In one study of this group, more than 700 participants described the amount of time they spent in seven activities that involve significant information processing. These activities included listening to the radio, reading newspapers, playing puzzle games, and going to museums. After following the participants for 4 years, investigators found that the risk of developing AD was 47 percent lower, on average, in those who did the activities most frequently than in those who did them least frequently. Other research in this same group suggests that the more formal education a person has, the better his or her memory and learning ability,

even in the presence of beta-amyloid plaques.

Another NIA-funded study of healthy older people and people with possible or probable AD also supported the value of lifelong learning and mentally stimulating activity. These scientists

found that during their early and middle adulthood, the healthy older people engaged in more of those activities and spent more hours engaged in them than did those who ultimately developed AD.

The reasons for these findings aren't entirely

clear, but it may be that mentally stimulating activities protect the brain in some way, perhaps by establishing a "cognitive reserve." Perhaps these activities help the brain become more adaptable and flexible in some areas of mental function so that it can compensate for declines in other areas. A third possibility is that a lower level of engagement in intellectual stimulation could reflect very early effects of the disease. Scientists are working hard to clarify the complicated role that education and intellectual stimulation may have on AD risk.

#### Reducing heart disease risk.

Evidence is emerging that actions to reduce heart disease risk may have some broader benefits as well. In recent years, a number of test tube, animal, and population studies have suggested a connection between AD risk and high levels of cholesterol in the blood. These findings led scientists to wonder whether drugs that lower blood cholesterol might also lower the risk of developing symptoms associated with declining mental function (dementia) and AD. Two recent studies that examined this question found a significant reduction in dementia risk in individuals who took statins, the most commonly-prescribed cholesterollowering drug. The effects did not appear to be related to lowering cholesterol in and of itself, but rather to some action of the statins. NIA is now funding a clinical trial to determine

whether a statin will slow the rate of decline in people with AD.

Other research has found that a high level of an amino acid called homocysteine is associated with an increased risk of developing AD. A high level of homocysteine is known to

increase heart disease risk. NIA-funded studies in mice have shown that high levels of this amino acid can make neurons stop working and die. The relationship between AD risk and homocysteine levels is particularly interesting because blood levels of homocysteine can be

reduced by increasing intakes of folic acid and vitamins B6 and B12. Currently NIA is funding a large and carefully controlled clinical trial to determine whether reducing homocysteine levels through high-dose supplements will slow the rate of decline in people with AD.

Some studies also suggest that high blood pressure in midlife, an important heart disease risk factor, might also have a negative effect on cognitive function in late life, particularly for those who carry the APOE **g**4 form of the APOE gene.

Being physically active. Evidence is also accumulating that being physically active may benefit more than just our hearts and waistlines. Research in animals has shown that both physical and mental function improve with aerobic

both physical and mental function improve with aerobic fitness. So, scientists funded by NIA decided to see whether it might be true for humans as well. In a study of 124 older adults, they found that those who were assigned to walking for exercise became more physically fit than those who were assigned to a stretching and toning exercises group. As they became more physically fit, the walkers also showed gree

fit, the walkers also showed greater improvements on "executive function" tests (planning, scheduling, decision-making) than did the other group.

### Other Factors Under Study

Scientists are actively investigating several other areas that may be important to preventing AD someday. For example, they are looking at agents that may affect the AD disease process and investigating ways to assess very early changes in the brain associated with AD. Finally, research to develop an AD vaccine is underway.

Non-steroidal anti-inflammatory drugs (NSAIDs) are one of the most important of these agents. Inflammation of tissues in the brain is a common feature of AD, but it is not clear whether it is a cause or effect of the disease. Some evidence from population studies suggests that NSAIDS, such as ibuprofen, naproxen, and indomethacin, are associated with a decreased AD risk. NIA is currently supporting a clinical trial to determine whether NSAIDs can prevent AD in people who are at risk, but who do not yet show symptoms of the disease.

Another promising area of research relates to a longstanding theory of aging. This theory suggests that over time, damage from a kind of molecule called a free radical can build up in neurons. This damage, called oxidative damage, can result in a loss of function and contribute to AD. Some population and laboratory studies suggest that anti-oxidants from dietary supplements or food may provide some protection against oxidative damage. Several clinical trials are investigating whether two **anti-oxidants**—vitamins E and C—can

slow cognitive decline and development of AD in normal aging individuals. The NIA and National Cancer Institute are currently funding a study to recruit volunteers for an antioxidant clinical trial that will examine whether taking vitamin E and/or selenium supplements over a period of 7 to 12 years can help to

prevent memory loss and dementia.
Other vitamins and food constituents are being actively studied.

(continued on next page)



Ginkgo biloba, a readily available natural product, has been the focus of recent media reports as a potential treatment for AD. Although a 1997 study in the U.S. suggested that a ginkgo extract may be of some help in treating the symptoms of AD and vascular dementia, there is no evidence that ginkgo biloba will cure or prevent AD. In addition, some recent studies imply that daily use of ginkgo biloba extracts may cause excessive bleeding, especially when combined with daily use of aspirin. Much more research is needed. At the NIH, the National Center for Complementary and Alternative Medicine is currently conducting a clinical trial to explore whether ginkgo has any effect on preventing or delaying cognitive decline in older adults.

Investigators are trying to discover biological markers that could indicate early AD changes in the brain. Understanding more about these markers, how they work, and what causes their levels to change, will help investigators answer questions about the cause and development of AD. These answers may lead one day to approaches for delaying or preventing AD. Investigators are also using

**neuroimaging techniques**, such as magnetic resonance imaging (MRI) and positron emis-

and position emission tomography (PET), to measure brain structure and function. Another major NIA research program—the Neuroimaging and Biomarkers in Mild Cognitive Impairment (MCI) and AD

Initiative—will fund a large study to determine whether MRI and PET scans, or other imaging or biological markers, can be used to identify early AD changes and progression. One day, these measurements may be able to identify those people who are at risk of AD before they develop symptoms and to more effectively assess efficacy of drug interventions.

*Immunization* is a common practice that protects people against disease. In the past few years,

scientists have explored whether this approach also could be useful in preventing AD. Early studies in mice were so successful in reducing betaamyloid deposits and improving performance on memory tests that investigators conducted preliminary trials in humans. These trials had to be stopped because of side effects that occurred in participants, but the study still provided a wealth of useful information that has been used in new NIA-funded studies in mice. Although scientists still have a long way to go, this exciting research is helping clarify the AD disease process, and it may still be one key to effective AD diagnosis, treatment, and prevention strategies in the future.

### What's the Take-Home Message?

Though our knowledge is growing rapidly, we still don't know everything about what triggers the development of AD and how that process might be delayed or prevented. Scientists are working hard to understand the many factors involved in this complex disease.

Right now, no known treatments, drugs, or pills can delay or prevent AD. Furthermore, a person cannot do

> anything now about the major AD risk factors age and genetics. On the other hand, people can take some actions that might reduce other possible AD risk factors. These include lowering

cholesterol and homocysteine levels, lowering high blood pressure levels, being physically active, and engaging in intellectually stimulating activities. All of these risk-lowering strategies are good to do anyway because they lower risk for other diseases and can help to maintain and improve overall health and well-being.

It is important to note that the AD disease process begins long before symptoms appear. Therefore, to be really effective, a person should

begin any prevention actions early in life and continue them throughout adulthood.

### A Final Word of Caution

Because AD is such a devastating disease, caregivers and patients may be tempted by untried, unproven, and unscientific cures, supplements, or prevention strategies. Before trying pills or anything else that promises to prevent AD, families should use caution and check with their doctors first. These purchases might be unsafe or a waste of money. They might even interfere with other medical treatments that have been prescribed.

#### Internet Resources

Becoming well-informed is another important step. Thousands of Internet websites provide health-related information, including information on Alzheimer's disease. Some of the information on these websites is reliable, but some is not. Health websites sponsored by the Federal government are good sources of information, as are websites of large professional organizations and well-known medical schools. Among the Federal resources available are:

- www.nia.nih.gov. Among the many topics offered by NIA are:
   Online Health Information: Car
  - Online Health Information: Can You Trust It?
  - Life Extension: Science Fact or Science Fiction?
  - Pills, Patches, and Shots: Can Hormones Prevent Aging?
     Each of these publications can be found at www.niapublications.org
- Alzheimer's Disease Education and Referral (ADEAR)
   Center: www.alzheimers.org

Other helpful Federal websites are:

- Food and Drug Administration: www.fda.gov/opacom/ morecons.html
- National Library of Medicine: www.medlineplus.gov
- Office of Disease Prevention and Health Promotion: www.healthfinder.gov

#### **The Forgetting**

(from page 1)

book, The Forgetting—Alzheimer's: Portrait of an Epidemic. The documentary will provide an all-encompassing look at Alzheimer's disease—weaving together the history and biology of the disease, the intense real-world experiences of AD patients and caregivers, and the race to find a cure.

Three patients and their families bring us close to the intense, real-world experience of AD. Early stage patient Gladys Fuget jokingly denies problems with her memory, while we watch it visibly slip away. She cannot remember what year it is, nor can she recognize her own image in a photograph. Fran Noonan wrestles with the middle stages of AD, tormented by uncontrollable outbursts of anger, sadness, and confusion. Late in the disease, Isabelle McKenna is robbed of everything but the ability to sense human touch and the presence of a family who stands by as she nears the end. We witness these families' tenacity, frustration, grief, and humor.

Science itself is the fourth dramatic character in *The Forgetting*. The documentary follows the trials and triumphs of researchers battling AD on the front lines. The experts make the research palpable and real, explaining in downto-earth terms how AD dismantles the day-to-day lives of Gladys, Fran, and Isabelle.

Author David Shenk explains how dementia has so wholly captured the human imagination, intriguing countless great minds, from Aristotle to Shakespeare to Dickens. "This is a disease that's been around since as long as humans have, thousands and thousands of years," says Shenk. "But only now are we living long enough in great enough numbers that statistically it's big, I mean important. It's becoming not just a family tragedy; it's becoming a social tragedy."

More than a television program, The Forgetting is a multifaceted project aimed at helping people in direct ways. An informative half-hour special hosted by award-winning actor David Hyde Pierce will follow the documentary. This show, ALZHEIMER'S: The Help You Need, will bring together a panel of experts to provide authoritative answers to commonly-asked questions and direct viewers to organizations and resources that can offer help and support. Hyde Pierce, who watched both his grandfather and his father suffer with AD, knows first hand the challenges of dealing with the disease and the sense of personal vulnerability. "With each year that passes, my fear grows—my fear that the disease process that destroyed their memories, and ultimately their lives, has begun developing in my own brain. My fear grows not just for myself, but also for my generation the 14 million baby boomers who will get AD if we don't find a way to beat this dreadful disease."

ways that patients, families, and caregivers can go about finding national and community-based resources for information and support.

A new website, located at www.pbs.org/theforgetting, will offer information and support—providing advice, resources, and chances for families to share emotions and insights. A downloadable Viewer's Guide will provide practical information and answers to questions. And local PBS stations will hold outreach and educational events around the broadcast, enriched and supported by a variety of grass roots organizations, including the local chapters of the Alzheimer's Association.

The Forgetting will reach out to those concerned about AD—and it will do so for years to come, through PBS rebroadcasts and lasting resources in video, DVD, and on the Web. The Forgetting website provides reassurance, action ideas, and answers to the big questions...

- What's it like to have Alzheimer's? See the disease through the eyes of those who have it.
- Who's at risk? Attend a crash course in current Alzheimer's wisdom. Find out why the disease is soaring to epidemic proportions, what the risk factors

are, and whether or not you can protect yourself.

- What's normal? What's not? Take a humorous look at some common memory mishaps, and consider the difference between those "senior moments" and the real signs of dementia.
- How do we live well with Alzheimer's? Gain insight from those who have successfully lived with and loved an Alzheimer's patient. Share your own lessons from the front lines, and use the "planning ahead" feature to reduce overwhelming anxieties about the future into a simple to-do list.



Hyde Pierce and the panel field questions from a live studio audience, which included family members featured in The Forgetting. Commonly asked questions like "How do I get my mother to give up the car keys?" have more than one answer, and panelists offer a variety of suggestions. Other topics addressed are the risks of someone getting Alzheimer's if a family member has the disease; how to distinguish normal age-related forgetfulness from possible symptoms of early-stage Alzheimer's; tips that caregivers can use to help people with AD in their care; and ways that they, themselves, can cope with the enormous pressures, frustrations, and responsibilities they face. The panel also suggests

### NIH Launches NIHSeniorHealth.gov

### New Web Site Features Health Information, Talking Web, Easy Access for Older Adults, Visually Impaired

The National Institutes of Health (NIH) recently launched NIHSeniorHealth.gov (www.NIHSeniorHealth.gov), a new

talking web site with formats and topics tailored to the needs of older people. The senior-friendly site takes advantage of techniques developed by the National Institute on Aging (NIA) and the National Library of Medicine (NLM) designed to encourage older people to use the Internet, and this site in particular, as a resource for the best information on health and medical research.

The site was presented in October 2003 at a briefing requested by Senator Tom Harkin of Iowa. Harkin, whose State ranks third behind

Florida and Pennsylvania in the percentage of people age 65 and older, said, "As our population ages, good health will be important on both a policy and personal level. For all of us, that starts with the right information on prevention and treatment, which NIH is now providing seniors by means of this new and innovative website."

"The way in which people think, learn, and remember, changes with age," says Dr. Richard J. Hodes, director of the NIA. "This new website is based on the latest research on cognition and aging, and should prove to be an accessible and understandable way for seniors to find information about their health."

"The use of the Internet for health information is increasing dramatically,"

notes Dr. Donald A.B. Lindberg, director of the NLM. "But the small type, low contrast, and difficulty in navigating around many sites have been obstacles for seniors.

NIHSeniorHealth.gov corrects many of those problems, as well as providing health information that is the best that NIH can offer."

To do this, the NIA and NLM brought together researchers who study cognition, website designers, and communications experts at the two institutes to fashion a site that is easy for older adults to read, understand,

Featuring Health Information from the National Institute of Health

Click to Begin

This website for older adults was developed by the National Institute on Aging and the National Institute on Aging U.S. National Library of Medicine
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remember, and navigate. For example, the site features large print and short, easy-to-read segments of information repeated in a variety of formats—such as open-captioned videos and short quizzes—to increase the likelihood it will be remembered. Consistent page layout and prompts help older adults move from one place to another on the site without feeling lost or overwhelmed. Each topic provides general background information, quizzes, frequently asked questions (FAQs), open-captioned video clips, transcripts for the videos, and photos and illustrations with captions. NIHSeniorHealth.gov has a "talking" function, which allows users the option of reading the text or listening to it as it is read to them. Finally, in addition to being seniorfriendly, the new site also complies

with Section 508 of the Rehabilitation Act of 1973, making it accessible for people with disabilities.

The risk of many diseases increases with age, so the site sponsors are focusing on health topics or specific diseases that are of particular interest to older people, including Alzheimer's disease, Alzheimer's disease caregiving, arthritis, balance problems, breast cancer, colorectal cancer, exercise for older adults, hearing loss, lung cancer, and prostate cancer. In coming months, topics will include complementary and alternative

medicine, diabetes, falls, shingles, vision changes, and others.

Along with the NIA and the NLM, other NIH components contributing topics to the website so far include the National Cancer Institute, the National Institute of Arthritis and Musculoskeletal and Skin Diseases, and the National Institute of Deafness and other Communication Disorders. More Institutes and Centers will be working with the NIA and the NLM to bring on the additional topics.

NIHSeniorHealth.gov is expected to serve as a model for web designers seeking to make sites

accessible for older adults. The NIA and NLM have developed a booklet, Making Your Web Site Senior Friendly; A Checklist, which gives guidelines that can be used to update any web site with cognitive aspects of aging in mind. Call the NIA Information Center at 1-800-222-2225 to order a copy, or go to www.niapublications.org.

The NIA leads the Federal effort supporting and conducting research on aging and the health and wellbeing of older people. The NLM, the world's largest library of the health sciences, creates and sponsors webbased health information resources for the public and the professions. Both are part of the National Institutes of Health in Bethesda, MD, part of the U.S. Department of Health and Human Services.



### AD Genetics Study Recruitment Materials Available

Two resources to help in recruitment efforts for the Alzheimer's Disease Genetics Study are available from the ADEAR Center. A brochure, Are 2 or More Siblings in Your Family Living with Alzheimer's Disease? provides clear, easy-to-read information on the following:

- What is the AD Genetics Study?
- Who can participate?
- Why are families so important?
- What will participants have to do?
- What will happen to my blood and health information?
- Is there any cost to participate?

The brochure also provides contact information for the National Cell Repository for Alzheimer's Disease by toll-free telephone (1-800-526-2839), e-mail (alzstudy@iupui.edu), and website (www.ncrad.org) for families wishing to participate.

A separate flyer, Why should my family participate in the Alzheimer's Disease Genetics Study? provides basic information that family members can use to discuss issues as they consider participating in the study.

To order the brochure and flyer call the ADEAR Center at 1-800-438-4380, or use the order form on the back page of this newsletter.

### Alzheimer's Disease Medications Fact Sheet Updated

#### Memantine described

The ADEAR Center's Alzheimer's Disease Medications Fact Sheet has been updated to include information on memantine, the most recent drug approved by the Food and Drug Administration for treatment of AD. Memantine will be marketed under the name Namenda®. Following approval by the FDA in October 2003, it is expected to be available early in 2004. Namenda® is an N-methyl Daspartate (NMDA) antagonist. It is prescribed for the treatment of moderate to severe AD. Studies have shown that the main effect of Namenda® is to delay progression of some of the symptoms of moderate to severe AD. The medication may allow patients to maintain certain daily functions a little longer. For example, Namenda® may help a patient in the later stages of AD maintain his or her ability to go to the bathroom independently for several more months, a benefit for both patients and caregivers.

Namenda® is believed to work by regulating glutamate, an important

brain chemical that, when produced in excessive amounts, may lead to brain cell death.

Also described in the Medications Fact Sheet are the four medications called cholinesterase inhibitors. These drugs are



prescribed for the treatment of mild to moderate AD. They may help delay or prevent symptoms from becoming worse for a limited time and may help control some behavioral symptoms. The medications are: Reminyl® (galantamine), Exelon® (rivastigmine), Aricept® (donepezil), and Cognex® (tacrine). Scientists do not yet fully understand how cholinesterase inhibitors work to treat AD, but current research indicates that they prevent the breakdown of acetylcholine, a brain chemical believed to be important for memory and thinking. As AD progresses, the brain produces less and less acetylcholine; therefore, cholinesterase inhibitors may eventually lose their effect.

Because NMDA antagonists work very differently from cholinesterase inhibitors, the two classes of drugs can be prescribed in combination.

### New publications from the NIA

Several new publications recently added to the NIA collection may be of special interest to healthcare professionals and caregivers:

- Caregiver Resources—lists a number of useful national organizations offering general assistance and information on Alzheimer's disease, assisted living, financial assistance, legal issues, meals/nutrition, medication/prescription drugs, and respite and hospice care.
- Online Health Information: Can You Trust It?—
  describes how to decide if the health information available on the Internet is credible and trustworthy. This Age Page also offers suggestions on where to start, and provides a checklist of the important questions to ask when visiting health websites.
- Long-Term Care: Choosing the Right Place—provides advice on how to select an appropriate assisted living facility or skilled nursing home and offers information on finances, planning, and making a smooth transition.

Each publication can be previewed and ordered online at www.niapublications. org, or you can use the order form on the back page of this newsletter.



### CHID Highlights

CHID Highlights describes materials recently added to the Alzheimer's disease file of the Combined Health Information Database (CHID). The items selected represent topics and formats of general interest to readers of Connections and ADEAR Center users or their clients. Please order directly from the source listed for each item. Journal articles are available in many university and medical school libraries. CHID is accessible on the Internet at <a href="https://www.chid.nih.gov">www.chid.nih.gov</a>, by following the link at <a href="https://www.alzheimers.org">www.alzheimers.org</a>, or by following the National Library of Medicine's link to CHID at <a href="https://www.nlm.nih.gov/medlineplus/databases.html">www.nlm.nih.gov/medlineplus/databases.html</a>.

### Getting the Best Medical Care

Alzheimer's Health Care Handbook: How to Get the Best Medical Care for Your Relative With Alzheimer's Disease, in and Out of the Hospital. 2002.

Mittelman, M.S.; Epstein, C.

Available from Marlowe and Company, 161 William Street, 16th floor, New York, NY 10038. (646) 375-2570, FAX: (646) 375-2571. PRICE: \$14.95.

This book is designed to help families obtain quality medical care for their relatives with AD, in and out of the hospital. Part 1 discusses routine health care for the person with AD, including doctor's visits, medications, mental health care, and the role of advance directives. Part 2 describes the steps that can be taken to prepare for a hospitalization, including completing a patient profile, planning for a medical crisis, going to the emergency room, and preparing for the hospital stay. Part 3 discusses the effect of hospitalization on the patient, the role of the family caregiver in the hospital, medical decision making, working with hospital staff, making the patient comfortable, the family's role in the treatment process, and preparing for discharge. Part 4 explains what happens after the patient is discharged, either to home or another care facility, and the options for endof-life care. The book includes a glossary of terms commonly used in prescriptions, a list of hospital personnel and their roles in patient care, and resources for further information and assistance.

### Dietary Fats and AD Risk

Dietary Fats and the Risk of Incident Alzheimer Disease.

Morris, M.C., et al.

Archives of Neurology. 60(2): 194-200. February 2003.

This article examines the effects of dietary fats on the incidence of AD in participants of the Chicago Health and Aging Project, a longitudinal study of risk factors for AD. A stratified random sample of 815 people aged 65 years and older who were initially free of AD completed a foodfrequency questionnaire 2.3 years before clinical evaluation for incident AD. The sample was 52 percent black and 61 percent female, with a median education of 12 years. A total of 131 people developed AD over a mean follow-up of 3.9 years. Intakes of saturated fat and transunsaturated fat were positively associated with risk of AD, whereas intakes of omega-6 polyunsaturated fat and monounsaturated fat were inversely associated. Consumption of vegetable fat and a high ratio of polyunsaturated to saturated fats also were protective against AD, but intakes of total fat, animal fat, and dietary cholesterol were not associated with risk of AD.

### Latino Caregiver Recruitment

Recruitment and Retention of Latino Dementia Family Caregivers in Intervention Research: Issues to Face, Lessons to Learn.

Gallagher, D., et al.

*Gerontologist.* 43(1): 45-51. *February* 2003.

This article examines issues related to the recruitment and retention of Latino dementia family careaivers in intervention research. First, it reviews the literature on demographic trends in the Latino population, barriers to the recruitment and involvement of Latino careaivers in research studies, and cultural factors that affect Latino caregivers' participation in research. Then, it offers several recommendations to improve the recruitment and retention of Latinos in caregiving research: (1) hire bilingual/bicultural staff in key positions, (2) use a conceptual translation of assessment instruments and recruitment and intervention materials, (3) develop culturally appropriate outreach and advertisement materials, (4) develop or tailor interventions to be culturally relevant and appropriate, (5) improve accessibility by addressing and resolving practical barriers, (6) use specific strategies to maximize retention, and (7) provide feedback to the community.

### Diagnosing Various Dementias

Dementia: Presentations, Differential Diagnosis, and Nosology. 2nd ed. 2003.

Emery, V.O.B., ed; Oxman, T.E., ed.

Available from Johns Hopkins University Press. 2715 North Charles Street, Baltimore, MD 21218-4319. 1-800-537-5487, FAX: (410) 516-6998. Website: www.press.jhu.edu. PRICE: \$99.95.

This book discusses the dementing

disorders and explains their overlap, presentations, differential diagnosis, and treatment. It advances a spectrum approach to understanding the dementias, arguing that each dementing disorder involves an array of varied but related presentations that form a continuous series. The Alzheimer dementias, vascular dementias, cortical and subcortical dementias, depressive dementias, and nondepressive pseudodementias are discussed within the context of this framework. It also discusses the boundaries between normal aging and dementia, diagnostic procedures, and treatment approaches. The book has a special focus on current classification systems, describing their weaknesses and offering recommendations for an improved nosology of the dementias. The second edition includes new material on neuroimaging, genetics, the role of inflammation in AD, and acquired immunodeficiency syndrome-related dementia. In addition, each chapter includes a new section on clinical applications.

### Dementia Nursing Guide

Dementia Nursing: A Guide to Practice. 2003.

Hudson, R., ed.

Available in U.S. from Ausmed Publications in care of Jamco Distribution. 1401 Lakeway Drive, Lewisville, TX 75057. 1-800-538-1287, FAX: (972) 353-1300. PRICE: \$59.95 for paperback book and 2 audio CDs.

This book is a guide to nursing practice in dementia care, presented within a holistic philosophy of personcentered care. It encourages nurses to go beyond the technical aspects of nursing practice to understand and meet the human needs of the people in their care. Different chapters address such topics as the history of dementia nursing, the relatives' perspective on dementia, the spiritual dimension, enriching the environment, memory loss, nutrition, wandering,

sensory loss, communication, restraints, quality use of medicines, incontinence, falls prevention, pain management, depression, aggression, pressure sores and wounds, palliative care, intimacy, listening to the person with dementia, and leisure. One chapter describes creative care options such as poetry, drama, art, dance, music, dolls, aromatherapy, animals, and reminiscence. Other chapters present a social model for the aged-care environment and a tool for assessing engagement and emotional wellbeing in residents with dementia.

### Staff Training: Dementia and Abuse

Abuse and the Dementia Patient. 2002.

Bellantoni, M.

Available from Video Press, University of Maryland School of Medicine. 100 North Greene Street, Suite 300, Baltimore, MD 21201. 1-800-328-7450. Website: www.videopress.org. PRICE: \$150 purchase, \$75 rental.

This videotape is designed to help long-term care providers avoid the abuse of residents with dementia by staff or other residents. Experienced nursing staff at Johns Hopkins Bayview Geriatric Center discuss the strategies they use to help prevent frustration and handle behaviors that might lead to abusive situations. The first part focuses on ways to handle potential abuse triggers, including combative and aggressive behaviors, confusion (while attempting reality orientation), wandering, use of restraints, taking other residents' possessions, catastrophic reactions, calling out, verbal abuse, and dislike of certain staff members. The second part looks at positive strategies for preventing abuse, including a gentle manner, understanding, coming back later, redirecting, distracting, and humor.

### Finger Foods for AD Patients

Finger Food Especially for Alzheimer Residents. 2002.

Haacker, R.W.

Available from Professional Printing and Publishing, Inc. P.O. Box 5758, Bossier City, LA 71171-5758. 1-800-551-8783, FAX: (318) 746-6995. Website: www.ppandp.com. PRICE: \$12.50.

This cookbook contains recipes for finger foods for nursing home residents with AD. An introductory section offers general advice for serving finger foods, trying the recipes, and addressing special nutritional needs. The recipes themselves are organized into four sections: (1) breads, biscuits, and rolls; (2) cookies, muffins, and other sweets; (3) meat, cheese, and fish items; and (4) vegetables. The book also has several measurement tables and a spice and herb guide.

### Environmental Improvement for AD Patients

Sensory Loss, Dementia, and Environments.

Bakker, R.

Generations. 27(1): 46-51. Spring 2003.

This article examines the environmental elements that can help support the remaining abilities of people with dementia and sensory loss. The first section, on visual impairment, discusses the use of way-finding cues; problems with depth perception and contrast sensitivity; exit control; correction of poor design; and strategies for reducing agitation, sleep problems, and visual misperceptions. The second section, on hearing disorders, focuses on ways to reduce distressing sounds and introduce pleasant sounds. The third section, on touch, offers suggestions to improve the design of the bathing room and equipment and to implement therapeutic touch programs

(continued next page)

such as massage and animal therapy. The last section, on taste and smell, includes ideas for dining room design, tableware selection, food choices, seating arrangements, and enhancing the environment with pleasant smells.

### Bathing the AD Patient

Bathing Without a Battle: Personal Care of Individuals With Dementia. 2002.

Barrick, A.L., et al, ed.

Available from Springer Publishing Company. 536 Broadway, New York, NY 10012-3955. (212) 431-4370, FAX: (212) 941-7832. Website: www.springerpub.com. PRICE: \$39.95.

This book presents an individualized, problem-solving approach to bathing and personal care of people with dementia. The strategies and techniques are designed to make bathing a more pleasant experience in both the institution and home settings. Part 1 provides an overview of the difficult behaviors that occur during personal care activities, general strategies for reducing the stress of the bathing experience, and the process of assessing behaviors and selecting individualized solutions. Part 2 looks at special concerns related to bathing, including pain management, skin care, determining the appropriate level of assistance, transfer techniques, the physical environment of the bathing room, and equipment and supplies. Part 3 discusses ways to support caregivers, such as staff training and self-care strategies, and some of the organizational issues that can affect caregivers. A quality improvement program for individualized bathing, a patient behavior rating checklist, and a caregiver behavior checklist are included in appendices.

### AD and Driving

Identifying Driving Impairment in Alzheimer Disease: A Comparison of Self and Observer Reports Versus Driving Evaluation.

Wild, K.; Cotrell, V.

Alzheimer Disease and Associated Disorders. 17(1): 27-34. January 2003.

This article compares self-reports and caregiver reports of driving behaviors with actual driving performance in patients with AD. Fifteen mildly impaired AD patients and 15 healthy elderly controls with valid driver's licenses were administered a series of questionnaires about daily functioning and driving ability. In addition, all participants were evaluated on a standardized road test. Although the self-ratings of AD patients and healthy elderly controls were similar, the independent evaluator rated drivers with AD as significantly worse than the controls on 9 of 10 driving behaviors. Further, AD patients' self-reports of driving ability were significantly better than the independent evaluator's ratings on 7 of the 10 items, whereas healthy elderly drivers rated themselves better than did the evaluator on only 1 item. Although caregivers were likely to acknowledge a general concern about their AD patients' driving, they underreported specific driving problems when their ratings were compared with those of the independent evaluator.

### Transportation Solutions

Transportation Solutions for Caregivers: A Starting Point. 2002.

Available from Easter Seals National Headquarters. 230 West Monroe Street, Suite 1800, Chicago, IL 60606. 312-551-7189. Website: www.easter-seals.org. PRICE: \$5.00 shipping and handling for 1 copy; \$8.50 for 2 to 5 copies

This transportation toolkit is designed to help family caregivers and volunteer drivers deal with the challenges that arise when transporting older individuals with dementia. It consists of a closed-captioned videotape and booklet that provide practical suggestions for dealing with dementia-type behaviors while driving, properly transferring patients from wheelchair to car, and using good body mechanics during transfers. The video presents interviews with both experts and family caregivers and shows various scenarios and techniques for solving common problems. The booklet includes information about communication, sensitivity to age-related impairments, preventing agitation, and providing physical assistance. It also has a list of helpful products, assistive devices, resources, and websites.

### Finding Joy in Caregiving

Finding the Joy in Alzheimer's. Vol. 2: When Tears Are Dried With Laughter. 2003.

Avadian, B.

Available from North Star Books. P.O. Box 259, Lancaster, CA 93584. 1-800-852-4890 (credit card orders only); (661) 945-7529. Website:

www.TheCaregiversVoice.com/books/. PRICE: \$15.00.

This book is designed to help caregivers find joyful moments in caring for their loved ones with dementia. It is a collection of personal stories, poems, and essays from caregivers across America, describing a variety of candid, humorous, and loving experiences in caring for someone with dementia. The book is organized into sections on caregivers, lessons from the loved ones, shared perspectives, tributes to relatives, and nearing the end of life. It includes tips for caregivers, an annotated resources list, and a list of suggested readings.



For a complete listing of upcoming conferences, please visit: www.alzheimers.org/

### January 30-31, 2004

National Adult Day Services Association 2nd Annual Conference, New Orleans, LA

Contact:

National Adult Day Services Association, Inc. 722 Grant Street, Suite L Herndon, Virginia 20170 1-866-890-7357 fax: 703-435-8631 info@nadsa.org www.nadsa.org

### February 12-13, 2004

18th Annual Bryan ADRC Conference: Alzheimer's 2004: Targeting the Epidemic, Durham, NC

Contact:

Joseph and Kathleen Bryan Alzheimer's Disease Research Center **Duke Family Support Program DUMC 3600 Duke University Medical Center** Durham, NC 27710 919-660-7510 http://adrc.mc.duke.edu

### February 21-25, 2004

American Association for Geriatric Psychiatry 17th Annual Meeting, Baltimore, MD

Contact:

American Association for Geriatric Psvchiatrv 7910 Woodmont Avenue, Suite 1050 Bethesda, MD 20814 301-654-7850 fax: 301-654-4137 www.aagponline.org

### February 24-27, 2004

Restauración Neurológica 2004: Symposium on Brain Aging & AD, Havana, Cuba

Contact:

calendar

Head, Basic & Clinic Group BA&AD Ave 25 no. 15805, entre 158 y 160 Cubanacan Havana City, CUBA www.ciren.ws/rt2004/restauracion% 20Neurologica%202004.htm

#### March 4-7, 2004

AMDA's 27th Annual Symposium: Making the Desert Bloom: Creating Excellence in LTC Medicine, Phoenix, AZ

Contact:

American Medical Directors Association 10480 Little Patuxent Parkway Suite 760 Columbia, MD 21044 410-740-9743 fax: 410-740-4572 www.amda.com

### March 11-13, 2004

American Society for **Experimental Neurotherapeutics** 6th Annual Meeting, Bethesda, MD

Contact:

American Society for Experimental **Neurotherapeutics** 611 East Wells Street Milwaukee, WI 53202 414-273-8290 fax: 414-276-3349 www.asent.org

### March 12, 2004

Dementia & Spirituality Conference, Lexington, KY

Contact:

Roberta Davis Alzheimer's Disease Research Center

Sanders-Brown Center on Aaina University of Kentucky Lexington, KY 40536 859-323-6316

fax: 859-257-4233

rdavis@aging.coa.uky.edu

### March 15-21, 2004

**Brain Awareness Week** 

Contact:

Dana Alliance for Brain Initiatives Brain Awareness Week Campaian

Clearinghouse

745 Fifth Avenue, Suite 900

New York, NY 10151

212-401-1680

fax: 212-593-7623 (fax) bawinfo@dana.ora www.dana.org/brainweek

### March 26-27, 2004

Alzheimer's Disease and Other Dementias, Baltimore, MD

Contact:

John Hopkins University Office of Continuing Medical Education PO Box 64128 Baltimore, MD 21264-4128 410-955-3169 fax: 410-955-0807 cmenet@jhmi.edu

### April 14-17, 2004

2004 Joint Conference of the American Society on Aging and the National Council on the Aging, San Francisco, CA

Contact:

ASA-NCOA Joint Conference 833 Market St, Suite 511 San Francisco, CA 94103-1824 415-974-9600 fax: 415-495-6509 jc04@asaging.org www.agingconference.org

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